

WHAT IS CLAIMED IS:

1. A chair comprising:

a chair frame;

5 a seat-back member mounted on the chair frame, which is comprised a seat part and a backrest part which are integrally formed with each other, and which is adapted to be tilted rearwardly and restored to its normal position; and

10 a lumbar support unit attached to a lower portion of the backrest part, which is automatically protruded forwardly when the seat-back member is tilted rearwardly, and is resiliently restored to its normal position when the seat-back member is erected.

15 2. The chair as set forth in claim 1, in which the lumbar support unit comprises:

 a lumbar plate which is hingedly connected at one end to the backrest part and is connected at the other end to the backrest part to be slid up and down, and which is adapted to 20 be protruded forwardly; and

 an actuating connector which is connected at one end to the lumbar plate and is connected at the other end to the chair frame such that the actuating connector causes the lumbar plate to be protruded forwardly when the seat-back member is tilted 25 rearwardly and is resiliently restored to its normal position

when the seat-back member is erected.

3. The chair as set forth in claim 2, in which the chair frame comprises a fixed frame having a fixed plate, and a
5 movable frame hingedly connected to the fixed frame and having an actuating plate, and the actuating connector comprises:

a connecting wire which is connected at one end to an upper end of the lumbar plate and is connected at the other end to the fixed plate of the fixed frame; and

10 a connecting tube into which the connecting wire is extended, and which is connected at one end to the backrest part such that the one end of the connecting tube is positioned at a location downwardly spaced from the one end of the connecting wire, and is connected at the other end to the
15 actuating plate of the movable frame.

4. The chair as set forth in claim 1, in which the one end of the connecting wire, which is connected to the lumbar plate, is exposed from the one end of the connecting tube by a certain
20 distance in its normal position, and the exposed distance of the connecting wire is equal to or longer than a distance by which the actuating plate moves downwardly.

5. The chair as set forth in claim 2, in which the chair frame comprises a fixed frame having a fixed plate, and a

movable frame hingedly connected to the fixed frame and having an actuating plate, and the actuating connector comprises:

a connecting wire which is connected at one end to a lower end of the lumbar plate and is connected at the other end to
5 the fixed plate of the fixed frame; and

a connecting tube into which the connecting wire is extended, and which is connected at one end to the backrest part such that the one end of the connecting tube is positioned at a location upwardly spaced from the one end of the
10 connecting wire, and is connected at the other end to the actuating plate of the movable frame.

6. The chair as set forth in claim 2, in which the lumbar support is provided at its upper end with an angled bracket
15 extended toward the backrest part and supporting a shaft, both ends of which are provided with rollers moving up and down for the sake of smooth motion of the lumbar plate, and the backrest plate is provided a rail plate at a position corresponding to the lumbar support unit, the rail plate being provided at its
20 both sides with guide rails extended downwardly, the rollers being slid up and down along the guide rails of the rail plate.

7. The chair as set forth in claim 3, in which the connecting wire is provided at one or both ends with wire
25 control means for controlling lengths of the connecting wire

DRAFT

exposed from the ends of the connecting tubes.

8. The chair as set forth in claim 7, in which the wire control means comprises a bolt integrally coupled to the end of
5 the connecting wire, and a fastening nut disposed on the fixed plate and threaded with the male threaded portion of the connecting wire to control the exposed length of the connecting wire by its own rotation.

Sub A

10 > 9. The chair as set forth in claim 2 or 3, in which one or both ends of the connecting tube of the actuating connector are formed at outer surfaces thereof with male threaded portions, and each of the threaded portion of the connecting tube is threaded into two nuts for fastening the male threaded portion.

15

10. A chair comprising:
a fixed frame;
a movable frame coupled to the fixed frame to be tilted rearwardly;
20 a seat part attached to the fixed frame;
a backrest part attached to the movable frame;
a lumbar support unit attached to a lower portion of the backrest part, which is automatically protruded forwardly when the backrest part is tilted rearwardly, and is resiliently
25 restored to its normal position when the backrest part is

erected.

11. The chair as set forth in claim 10, in which the lumbar support unit comprises:

5 a flexible lumbar plate connected to a lower part of the backrest part; and

an actuating connector which is connected at one end to an upper end of the lumbar plate and connected at the other end to the fixed frame;

10 whereby the lumbar plated is protruded forwardly and restored to its normal position by displacement of the movable frame with respect to the fixed frame when the backrest part is tilted and restored.

15 12. The chair as set forth in claim 11, in which the actuating connector comprises:

a connecting wire which is connected at one end to an upper end of the lumbar plate and is connected at the other end to the fixed plate of the fixed frame; and

20 a connecting tube into which the connecting wire is extended, and which is connected at one end to the backrest part such that the one end of the connecting tube is positioned at a location downwardly spaced from the one end of the connecting wire, and is connected at the other end to the
25 movable frame or the movable frame.

SEARCHED
INDEXED
SERIALIZED
FILED

13. The chair as set forth in claim 11, in which the actuating connector comprises only a connecting wire, which is connected at one end to an upper end of the lumbar plate and is
5 connected at the other end to the fixed frame.

14. The chair as set forth in claim 11, in which the actuating connector comprises:

a connecting wire which is connected at one end to an
10 upper end of the lumbar plate and is connected at the other end to the fixed frame; and

a connecting tube into which the connecting wire is extended, and which is connected at one end to the backrest part such that the one end of the connecting tube is positioned
15 at a location upwardly spaced from the one end of the connecting wire, and is connected at the other end to the movable frame or the movable frame.

15. The chair as set forth in claim 11, in which the lumbar support is provided at its upper end with an angled bracket extended toward the backrest part and supporting a shaft, both ends of which are provided with rollers moving up and down for the sake of smooth motion of the lumbar plate, and the backrest plate is provided a rail plate at a position
25 corresponding to the lumbar support unit, the rail plate being

provided at its both sides with guide rails extended downwardly, the rollers being slid up and down along the guide rails of the rail plate.

*Sub
P2* > 16. The chair as set forth in claim 12 or 13, in which the connecting wire is provided at one end with wire control means for controlling lengths of the connecting wire exposed from the ends of the connecting tube.

10 17. The chair as set forth in claim 16, in which the wire control means comprises a bolt integrally coupled to the end of the connecting wire, and a fastening nut disposed on the fixed plate and threaded with the male threaded portion of the connecting wire to control the exposed length of the connecting
15 wire by its own rotation.

18. The chair as set forth in claim 14, in which the end of the connecting tube of the actuating connector is formed at outer surfaces thereof with a male threaded portion, and the
20 threaded portion of the connecting tube is threaded into two nuts for fastening the male threaded portion.

Add A3 >